our tariffs a single cent on a single pair of tennis shoes, instead China needs to start buying goods from the United States.

If they knew that they would suffer some loss of access to the U.S. market, they would do it. The Chinese, when confronted by real tariffs or the real threat of tariffs, will find that our goods meet their needs, but if they are confronted by a deal that asks them to do nothing more than change the irrelevant regulations that they place on the top of the table and ignores the results of what happens underneath the table, then they will be laughing all the way to even larger trade surpluses with the United States.

Mr. Speaker, let me now bring up, in the waning minutes of this brief presentation, a third topic, a topic that is very important. I have only a bit to say about it, because, frankly, it is a topic that has me stumped. Let me by way of introduction mention that this is a topic that, as far as I know, has never been addressed.

It is a topic that my staff has said, BRAD, maybe you do not want to bring that up, because you will be the only one talking about it, you will look weird. It is a topic I ought to bring up, because it is one of the seminal topics. And it is only one of several seminal topics that gets no attention; by seminal topics, I mean one of the topics that really goes to where we are going as a species and what are the dangers, not only to the prosperity of the people in my district and in the country, not only to the issues we fight about here everyday, but to where we are going as humankind.

Now, there are a number of issues that rise to that level of significance that do receive significant attention: nuclear proliferation, environmental catastrophe, overpopulation; all of these threaten humankind's continued prosperous existence on this planet.

There is a fourth issue that does, I think, rise to the level where it can be included, and it is an issue really without a name; I call it the issue of engineered intelligence.

I am going to propose to this House, I hope some of my colleagues will join me, we will have dinner, we will have a drink or two, we will think this over, not maybe a drink or two, we will think over what form this bill should take, but I am planning to introduce a bill calling for the creation of a national commission on engineered intelligence.

There are several different forces coming together or scientific technologies that come under the title of engineered intelligence: First, there is biological engineering which could give us either of two huge ethical dilemmas; one is the prospect that biological engineering will allow us to design some sort of animal, perhaps starting with human DNA and going down, perhaps starting with chimpanzees' DNA and going up, but some sort of animal that is significantly more intelligent than the domestic animals that help us do our work, sheepdogs or watchdogs or seeing eye dogs, considerably smarter than the canines that help us do work, but less intelligent, less self-aware than human beings, and one wonders whether this would be an engineered slave race or just an improvement in today's pooches, a better seeing eye dog, or a sparely self-aware cognitive entity engineered by man to serve man, arguably to be enslaved by man.

Biological engineering can engineer intelligence at a level where some will argue that that entity deserves the protection of our Constitution, and others would argue that that entity is here to serve us in the same humane way that we turn to watchdogs and seeing eye dogs. Likewise, biological engineering can go beyond.

I can see, not today, but we are within 20 years or 30 years or 50 years of when biological engineering cannot only do what I just covered, but could also engineer an intelligence well beyond that of the average person, perhaps well beyond that of any human that has ever lived, and we would have to wonder, do we want our scientists to create a new species that Darwin might think is superior to our own? I do not know.

But it raises ethical issues that are going to take longer to resolve than it will take the science to get there and present those logical issues, those ethical issues to society.

One example is that Einstein a few years before World War II, together with others, brought to the attention of Franklin Roosevelt the great power or potential power of nuclear science and the nuclear bomb, and we had only a few years to consider what that would mean. The science developed more quickly than the ethics, and we had to struggle as a species to figure out, and we are still struggling to figure out what the rules are with regard to the nuclear engineering.

We need to begin thinking now of the ethics and the international agreements and the laws that are going to apply when science gets to where only science fiction is today.

Mr. Speaker, it is not just is biological engineering capable of engineering intelligence; it is also mechanical engineering. One of my friends has said that perhaps the last decision that will be made by the human race is whether our successors are the products of biological engineering or mechanical Silicon Valley engineering; whether our replacements are carbon-based or silicon-based, because I do not know whether it will be biological engineering that engineers intelligence first, or whether intelligence rivaling our own or perhaps surpassing our own will first come from silicon chips; but the same ethical issues arise.

One can imagine a thinking machine capable of spirituality. I believe there is a book that addresses that issue by that title.

One can imagine a thinking machine smarter than any computer, almost self-aware, some would argue properly used by people, others would say properly embraced as the constitutional equal of human beings. Likewise, it is possible for us through silicon engineering, through computer engineering that some day we will invent machines considerably smarter than us who may or may not regard us as their appropriate peers or masters.

I know this is science fiction, but would it not be wise to spend a few years, and a few, in the minds of a few people a lot smarter than I am trying to figure out what we would do if science begins to offer this as an alternative for human kind?

I can only mention third, nanotechnology, the idea of engineering at the molecular level, at a level where perhaps it would be hard to decide whether what we had engineered was biological or mechanical, or maybe we will see a fusion of biological and mechanical or biological and electronic engineering where a combination of silicon chips and brain cells from human DNA or brain cells from dog DNA are fused together.

I do not want to sound unusual, but the science of the future will be a little unusual. We in this Congress will not do the science, but we in this Congress should make sure that we focus the appropriate societal attention long in advance on the ethical dilemmas that will face us as engineered intelligence either approaches or surpasses our own.

Mr. Speaker, although there would be one benefit of such marvelous engineered intelligence for, perhaps if we had an engineered intelligence massively smarter than myself, maybe we would know what the right course was for the World Bank to take or what the right course was for this Congress to take on the issues I addressed earlier in this speech.

RECESS

The SPEAKER pro tempore (Mr. SHIMKUS). Pursuant to clause 12 of rule I, the Chair declares the House in recess subject to the call of the Chair.

Accordingly (at 8 o'clock and 28 minutes p.m.), the House stood in recess subject to the call of the Chair.

□ 2345

AFTER RECESS

The recess having expired, the House was called to order by the Speaker pro tempore (Mr. DREIER) at 11 o'clock and 45 minutes.

REPORT ON RESOLUTION PROVIDING FOR FURTHER CONSIDERATION OF H.R. 4205, FLOYD D. SPENCE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2001

Mr GOSS, from the Committee on Rules, submitted a privileged report